

Division of Waste Management Solid Waste Section

UNIT	UNIT TYPE:											
Lined MSWLF		LCID		YW		Transfer		Compost	X	SLAS		COUNTY: Burke
Closed MSWLF	X	HHW		White goods	X	Incin		T&P	X	FIRM		PERMIT NO.: 12-03
CDLF	X	Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO		SDTF		FILE TYPE: COMPLIANCE

FACILITY NAME AND ADDRESS:

Burke County Land Fill – Johns River Facility 2500 Marsh Trail Rd. Morganton, NC 28680

GPS COORDINATES: N: <u>35.78227</u> E: <u>-81.6916</u>

FACILITY CONTACT NAME AND PHONE NUMBER:

Name: Carson Fisher - General Services Director

Telephone: (828) 430-1777

Email address: hcfisher@co.burke.nc.us

Fax: (828) 439-4396

FACILITY CONTACT ADDRESS:

Bryan Steen – County Manager Burke County General Services P.O. Box 219

Morganton, NC 28680

PARTICIPANTS:

Bill Wagner, Environmental Senior Specialist - Solid Waste Section

STATUS OF PERMIT:

Permit Active: Issued November 10, 2010 (DIN 9043)

Operations Plan Included in "Application for Continued Operations of a C&D On Top of a Closed MSW

Landfill", June 2008 (DIN 5057) - Approved 11/03/08

Permit Active: Issued November 10, 2010

Operations Plan Included in "Application for Continued Operations of a C&D On Top of a Closed MSW

Landfill", June 2008 (DIN 5057) - Approved 11/03/08

C&DLF FACILITY PERMIT NO: 12-03	ISSUANCE DATE	DIN No.
Original Permit: MSWLF:	April 16, 1987	
Original Permit: CD Unit 3 Acre Area	January 7, 1998	
Modification: C&D Unit 7 Acre Area	June 1, 1999	
Amendment: C&D Unit Extension	January 11, 2006	
Modification: C&DLF Unit vertical expansion	February 20, 2007	
Corrective Action Plan (CAP): Exceedances of Groundwater Protection Standards (GPS)	June 2008	6585

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C&DLF FACILITY PERMIT NO: 12-03 (Con't)	ISSUANCE DATE	DIN No.
Operations Plan: C&D on Top of Closed MSW	June 2008	5057
Permit to Operate (PTO): C&D Landfill	November 10, 2010	9043
Approval of "Request for Authorization Letter" (RAL) – Small Type I Composting Unit and Small Land Clearing and Waste/Debris Treatment and Processing Unit.	November 24, 2008	6237

PURPOSE OF SITE VISIT:

Site visit to verify compliance with corrective actions for violations cited in the report of the August 8, 2011 compliance audit.

FACILITY HISTORY:

The Johns River Municipal Solid Waste Landfill is an un-lined landfill owned by Burke County. The original permit (12-03) for this facility was issued on April 16, 1987. The municipal solid waste facility was closed on December 31, 1997 in accordance with the requirements in 15A NCAC 13B .1627.

STATUS OF PAST NOTED VIOLATIONS:

- 1. Violation of 15A North Carolina Administrative Code (NCAC) 13B .0544(b)(2): Monitoring wells must be designed and constructed in accordance with the applicable North Carolina Well Construction Standards as codified in 15A NCAC 02C has not been corrected. This violation has not been corrected: A random inspection of groundwater monitoring wells found two wells (MW-8 and MW-15S) that were not properly secured with padlocks. (Photos #1 and #2)
- 2. Violation of 15A North Carolina Administrative Code (NCAC) .0544(b)(2): "Monitoring wells must be designed and constructed in accordance with the applicable North Carolina Well Construction Standards as codified in 15A NCAC 02C.

Specifically 15A NCAC 02C .0108(o) requires that: "Each non-water supply well shall have permanently affixed an identification plate." While a random inspection of groundwater and landfill gas monitoring wells did not find any wells that did not have the required identification plate, no plan to correct this violation, or any other evidence, has been submitted to the Solid Waste Section to show that this violation has been corrected.

OBSERVED VIOLATIONS:

1. 15A North Carolina Administrative Code (NCAC) 13B .0534(b)(2)(C) states in part: "The permittee must furnish to the Division any relevant information that the Division may request to determine whether cause exists for modifying, revoking or suspending the permit, or to determine compliance with the permit."

Burke County has not provided the Solid Waste Section (SECTION) with information that the SECTION requested in the Notice of Violation (NOV) dated August 29, 2011. Specifically, the SECTION requested in the NOV, that no later than October 10, 2011, Burke County submit to Bill Wagner a written plan, with time lines, for correcting violations of 15A NCAC 13B .0544(b)(2). To date, Burke County has failed to provide the requested information.

In order to correct the above cited violation #1, Burke County must, by no later than May 26, 2011, submit a written plan, with time lines, for correcting violations of 15A NCAC 13B .0544(b)(2) to Bill Wagner at the following address:

Bill Wagner NCDENR – Asheville Regional Office 2090 US Hwy 70 Swannanoa, NC 28778

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2. 15A North Carolina Administrative Code (NCAC) 13B .0542(a) states in part: "The owner or operator of a C&DLF unit must maintain and operate the facility in accordance with the operation plan prepared in accordance with this Rule." Section 3(D) – "Cover Materials Requirements", of Burke County's approved "Operations Plan" states that "Waste will covered with six inches of earthen material when the waste disposal area exceeds one-half acre and at least once a week."

On April 16, 2012 I observed that more than approximately 0.7-acres had not been covered with six-inches (Photos #3 & #4 and Figure 1) of earthen material as required by 15A NCAC 13B .0542(a). Burke County has failed to operate the C&D landfill in accordance with their approved "Operations Plan" in that they have failed to cover waste with six-inches of earthen material when the waste disposal area exceeds one-half acre.

In order to correct the above cited violation #2, by May 4, 2012 Burke County must covering all wastes with six inches of earthen material when the waste disposal area exceeds on-half acre and at least once a week."

3. 15A North Carolina Administrative Code (NCAC) 13B .0544(b)(2) states: "Monitoring wells must be designed and constructed in accordance with the applicable North Carolina Well Construction Standards as codified in 15A NCAC 02C."

On April 16, 2012 I observed that two of the groundwater monitoring wells were not constructed in accordance with the requirements set forth in 15A NCAC 02C (Photos #1 and #2), as required by 15A NCAC 13B .0544(b)(2). Specifically 15A NCAC 02C .0108(k) requires that: "All non-water supply wells, including temporary wells, shall be secured with a locking well cap to ensure against unauthorized access and use."

In order to correct the above cited violation #4, by May 4, 2012 Burke County must ensure that all groundwater and landfill gas monitoring wells are properly secured to prevent unauthorized access and use in accordance with the requirements in 15A NCAC 02C .0108(k).

4. 15A North Carolina Administrative Code (NCAC) 13B .1627(d)(1)(A) requires, in part, that posclosure criteria consist of the following: "Maintaining the integrity and effectiveness of any cap system, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the cap system."

On April 16, 2012 I observed areas of the closed MSW landfill that had excessive on-site erosion in two locations and that these two areas did not have vegetative cover (Photos #5 & #6 and Figure 1).

Burke County has failed to maintain the integrity and effectiveness of the cap system of the MSW landfill in accordance with the requirements in 15A NCAC 13B .1627(d)(1)(A) in that they have failed to make necessary repairs to the cap to correct the effects of erosion, settlement, subsidence and other events from eroding or otherwise damaging the cap system.

In order to correct the above cited violation #4, Burke County must immediately take all necessary actions needed to correct all instances of excessive on-site erosion and re-establish a vegetative cover wherever needed, in accordance with the requirements in 15A NCAC 13B .1627(d)(1)(A) and in accordance with their approve *Operations Plan*.

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

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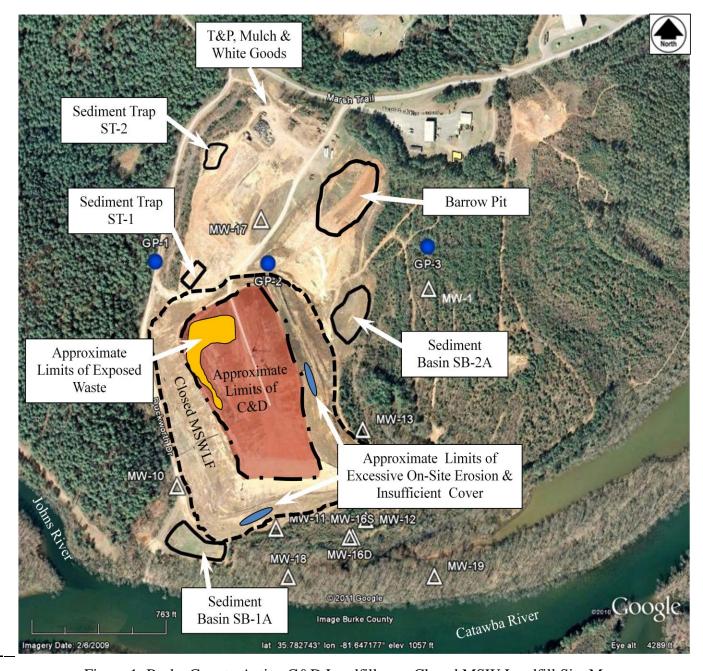


Figure 1: Burke County Active C&D Landfill over Closed MSW Landfill Site Map (GP – Landfill Gas Monitoring Well MW – Groundwater Monitoring Well)

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1. Groundwater monitoring well without a pad lock. (Believed to be MW-8)



2. Groundwater monitoring well without a pad lock. (Believed to be MW-15S)



3. Looking NW from the working face at large area of uncovered waste.



4. Looking E, up towards the uncovered waste on the upper western slopes. (Note: compactor at the upper right.)



5. Excessive on-site erosion & insufficient vegetative cover at the base of the eastern slopes of the closed MSW landfill.



6. Excessive on-site erosion & insufficient vegetative cover at the base of the southern slopes of the closed MSW landfill. (Yellow field book for scale: 4.5" X 7.5")

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OTHER PERMITED ACITIVITIES:

- White Goods Collection operated in accordance with NCGS Article 9, Part 2D.
- Small Land Clearing Waste / Debris Treatment and Processing (T&P) unit operated in accordance with 15A NCAC 13B .1400 – Approved November 24, 2008.
- Small Type I Composting Unit operated in accordance with 15A NCAC 13B .1400 Approved November 24, 2008.

ADDITONAL COMMENTS

- 1. All photos were taken by Bill Wagner on 4/16/12 unless noted otherwise.
- 2. Current Staff Certifications:

Richard L. Robinson	Landfill Operations Specialist	Expires 2/13/15
Alan Holcombe	Landfill Operations Specialist	Expires 2/13/15
H. Carson Fisher	Certified Landfill Manager	Expires 2/11/13
Greg Watts	Landfill Operations Specialist	Expires 8/30/12

- 3. This facility is an unlined C&D landfill over a closed unlined MSW landfill. (Figure #1)
- 4. Both the C&DLF and the MSWLF are under the same permit (12-03).
- 5. The service area for the C&D landfill is Burke County.
- 6. The C&D facility is currently accepting approximately 21-tons/day.
- 7. The facility is secured by a gate, which was unlocked landfill operations were being conducted at the time of the inspection.
- 8. Waste screening records are kept in the landfill operators "shed" adjacent to the mulch area.
- 9. The permit, operations plan and other landfill records and documentation are kept at the Burke County Services Building, 110 North Green St Entrance A, Morganton, NC
- 10. Signs at the entrance to the landfill were installed and posted as required.
- 11. The landfill is open from 7:00am to 4:00pm, M F; and from 7:00am to 1:00pm on Saturday.
- 12. The access roads to the landfill have been re-grading and are in good condition.
- 13. The Chesterfield F.D. provides fire response.
- 14. There was very little wind-blown waste observed. The east side of the C&D working area is bordered by a double row of fencing to catch wind-blown litter.
- 15. The edge of waste for the C&D landfill has been staked out with permanent markers.
- 16. The working face of the C&D landfill is located on the north end of the landfill. An excessively large area of exposed waste extends north and west from the working face. (Photos #3 and #4 and Figure 1)
- 17. No leachate seeps were observed on any portions of the C&D landfill.
- 18. There are no trees and woody vegetation on the landfill.

WATER QUALITY MONITORING

- 19. The required monitoring plan for water quality monitoring, at both the C&D landfill (12-03) and the closed MSW landfill (12-03), are the same. The specifics of these plans are spelled out in "approved document" # 1(Construction and Demolition Debris Landfill Permit Application Burke County, North Carolina. Prepared by Joyce Engineering, Inc. Prepared for Burke County. December 22, 1997) and in "approved document" # 7 (Application for Continued Operation of a C&D on Top of a Closed MSW Landfill. Prepared by Joyce Engineering, Inc. Prepared for Burke County. June 2008. DIN 6585
- 20. Water quality samples are collected for analysis on a semi-annual basis.
- 21. The most recent Water Quality Monitoring event for which records were available, occurred in June 2011. Joyce Engineering, Inc. (JEI) sampled one up-gradient well (MW-17) and six down-gradient wells (MW-10, 11, 12, 13, 16S, and 16D). Two "sentinel wells" (MW-18 and 19) that were installed in accordance with the Corrective Action Plan (CAP). The sentinel wells were installed to evaluate the performance of the approved CAP.

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- 22. The landfill staff has painted the most of the groundwater monitoring wells that are being monitored, red.
- 23. Samples were collected from two surface water points SMP-5 and 6 from un-named streams that feed into the Catawba River.
- 31. As requested in the previous compliance inspection report of August 29, 2011, please ensure that all groundwater monitoring wells are clearly marked with unique IDs.

LANDFILL GAS MONITORING

- 24. The required monitoring plan for landfill gas monitoring, at both the C&D landfill (12-03) and the closed MSW landfill (12-03), are the same. The specifics of these plans are spelled out in "approved document" # 1(Construction and Demolition Debris Landfill Permit Application Burke County, North Carolina. Prepared by Joyce Engineering, Inc. Prepared for Burke County. December 22, 1997) and in "approved document" # 7 (Application for Continued Operation of a C&D on Top of a Closed MSW Landfill. Prepared by Joyce Engineering, Inc. (JEI)) prepared for Burke County. June 2008. DIN 6585
- 25. Landfill gas monitoring is conducted by JEI on a quarterly basis.
- 26. The most recent landfill gas monitoring event for which records were available, occurred on August 25, 2011.
- 27. The landfill staff has painted the gas monitoring probes that are being monitored, blue.
- 28. Each monitoring event evaluates the possible presence of landfill gas in three gas monitoring probes (GP-1, 2, and 3), five on-site structures (GMP-1scale house, GMP-2 recycling center, GMP-3 office/shop, GMP-7A barn, and GMP-13 firing range) and nine other locations (GMP-4, 5, 6, 7, 8, 9, 10, 11, and 12). **Please ensure that all gas monitoring probes are clearly marked with unique IDs.**

WHITE GOODS

- 29. White goods are stored on a concrete pad north of the landfill that is surrounded by "jersey" barriers on three sides. (Photo #7)
- 30. There was a fair amount of white goods on site at the time of the audit.
- 31. OmniSource Southeast collects the white goods and scrap metal for recycling. OmniSource also removes the CFCs from refrigeration units.
- 32. No prohibited wastes were observed in the white goods collection area.

SMALL TYPE I COMPOSTING UNIT

- 33. Yard waste is ground into mulch for sale to the public: \$9.50 for a small truck load and \$11.00 for a standard truck load; \$38.50 for a "full scoop" approximately 4 yds.³ (Photos #8)
- 34. Land clearing debris is ground into mulch for use on-site.
- 35. Temperature records of the composting process were reviewed. Compost temperatures above 131°F were maintained for three consecutive days as required.



7. White goods area.



8. Yard waste & untreated wood pile for grinding into mulch.

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SMALL LAND CLEARING WASTE/DEBRIS TREATMENT AND PROCESSING UNIT

- 42. There was large amount of ground material from the treatment and processing unit on site. According to landfill staff, the market for boiler fuel is down and the County's existing markets want a product that is not so finely ground. (Photo #9)
- 43. Please ensure that no more than 6,000-yds.³ of material may be processed or stored on site per three month period, or have on hand at any one time a combination of waste material and finished product that exceeds6,000-yds.³.



13. Stock pile of boiler fuel.

Please contact me if you have any questions or concerns regarding this inspection report.

Bill Wagner Environmental Senior Specialist

Regional Representative

Sent on: 4/24/12	X	Email:	Hand delivery	X	US Mail To: Bryan Steen – Burke County	Certified No. 7009 1680 0000 7514 8819
20110 0110 1/2 1/12		23114111	Traine delivery		Burke County	
					Manager	

Phone: 828-296-4705

ec: Mark Poindexter, Field Operations Branch Head – Solid Waste Section
Jason Watkins, Western District Supervisor – Solid Waste Section
Shawn McKee, Compliance Officer – Solid Waste Section
H. Carson Fisher, P.E. – Burke Co. General Services Director / County Engineer